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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,988	10/02/2003	Fumitake Hirobe	03560.003360	8508

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EXAMINER

ROYER, WILLIAM J

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,988

Applicant(s)

HIROBE, FUMITAKE

Examiner

William J. Royer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12012003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

This application is in condition for allowance except for the following formal matters:

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

Figure 1 is objected to because it is unclear whether Figure 1 should be labeled - -- PRIOR ART --- or whether the specification should be amended to clarify that Figure 1 is illustrating an embodiment of the applicant's invention. It is noted that on page 1, line 23 – page 8, line 19, Figure 1 is described as a conventional (i.e., prior art) developing device. However, on page 11, lines 3-5 and page 14, line 17 – page 20, line 1, Figure 1 is described as an embodiment of the developing device according to the present invention. Is Figure 1 prior art or an embodiment of the invention?

On page 1, line 24, after “device” insert --- 1 ---.

On page 2, line 24, change “magnet” to --- magnetic ---.

On page 3, line 13, after “area” insert --- A ---.

On page 4, lines 5 and 23, after “device” insert --- 1 ---.

On page 4, line 12, change “sleeves” to --- developing sleeves 8 and 9 ---.

On page 4, line 15, after “sleeves” insert --- 8 and 9 ---.

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On page 5, line 1, before "sleeves" insert --- developing ---.

On page 9, lines 3 and 25, before "electrostatic" insert --- an ---.

On page 12, line 22, change "the" to --- a ---.

On page 13, line 21, change "the" to --- a ---.

On page 14, line 4, change "20" to --- 20(20Y, 20M, 20C, and 20K) ---.

On page 14, line 11, before "transfer" insert --- intermediate ---.

On page 14, lines 17, 19 and 23, after "device" insert --- 1 ---.

On page 15, line 19, before "first" insert --- the ---.

On page 16, lines 7 and 16, change "magnet" to --- magnetic ---.

On page 16, line 13, change "the developing" to --- a developing ---.

On page 16, line 16, after "roller" insert --- 8a ---.

On page 16, line 18, after "drum" insert --- 10 ---.

On page 16, line 20, change "of a" to --- of the ---.

On page 17, line 15, after "drum" insert --- 10 ---.

On page 17, line 22, delete --- the ---.

On page 18, line 3, after "device" insert --- 1 ---.

On page 19, lines 9 and 11, after "sleeve" insert --- 8 ---.

On page 19, lines 10 and 13, after "sleeve" insert --- 9 ---.

On page 19, line 22, after "device" insert --- 1 ---.

On page 27, line 9, change "Fig. 3" to --- Figs. 3A and 3B ---.

On page 32, line 3, change "f" to --- of ---.

On page 45, line 2, change "With a" to --- A ---.

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On page 45, line 5, after "first" insert --- developing ---.

On page 45, lines 11, delete each occurrence of --- the ---.

On page 45, line 12, change "the course" to --- course ---.

Appropriate correction is required.

Claim Objections

Claims 1 and 9 are objected to because of the following informalities:

Claim 1, line 1, before "electrostatic" insert --- an ---.

Claim 9, line 1, before "electrostatic" insert --- an ---.

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

Claims 1-8 are allowable over the prior art of record because the prior art of record fails to teach or suggest providing a developing device with a first developer carrying member and a second developer carrying member; wherein an average inter-

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peak distance on the surface of the first developer carrying member is greater than an average inter-peak distance on the surface of the second developer carrying member.

Claims 9-13 are allowable over the prior art of record because the prior art of record fails to teach or suggest providing a developing device with a first developer carrying member and a second developer carrying member; wherein the expression: $(Rz1/Sm1) < (Rz2/Sm2)$ is satisfied; wherein Sm1 represents an average inter-peak distance on the surface of the first developer carrying member, Sm2 represents an average inter-peak distance on the surface of the second developer carrying member, Rz1 represents a ten-point average roughness of the first developer carrying member, and Rz2 represents a ten-point average roughness of the second developer carrying member.

Relevant Prior Art

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Roof, Jr. et al disclose plural development rollers wherein at least one development roller has a small smooth surface area instead of an entirely roughened surface area.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Royer whose telephone number is (571) 272-2140. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "William J. Royer". The signature is written in a cursive, flowing style.

William J. Royer
Primary Examiner
Art Unit 2852

wjr
April 15, 2005